

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER NO. 88-098

UPDATED REQUIREMENTS FOR:

CITY OF SAN JOSE
SINGLETON ROAD CLASS III SOLID WASTE DISPOSAL SITE
SAN JOSE, SANTA CLARA COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region, (hereinafter referred to as the Board), finds that:

1. The Singleton Road Landfill is an inactive disposal site owned by the City of San Jose (hereinafter referred to as the discharger). The landfill was originally operated as two separate but adjacent disposal sites, one known as the Singleton Disposal Grounds, the other, the City of San Jose Dump. The City of San Jose Dump was operated by the discharger as a sanitary landfill from 1964 until 1978. The Singleton Disposal Grounds, the portion of the site located north of Singleton Road, had been owned by private operators until it was filled and purchased by the discharger. The discharger purchased the Singleton Disposal Grounds in 1973, and since that time, the two sites have been collectively referred to as the Singleton Road Landfill.
2. On January 28, 1971, the Board adopted Order Nos. 71-6 and 71-7 prescribing Waste Discharge Requirements (WDR) for the City of San Jose Dump and the Singleton Disposal Grounds, respectively. On December 19, 1978 the Board adopted Order No. 78-110, revising WDR's for both disposal sites, consolidated under one owner, the discharger. On February 18, 1981, WDR's were again revised by Board adoption of Order No. 81-8, closure requirements for the site. This Order is an update of Order No. 81-8 pursuant to Title 23, Chapter 3, Subchapter 15 of the California Administrative Code (Subchapter 15).
3. The Singleton Road Landfill is located at 885 Singleton Road in San Jose, as shown on Attachment A, attached hereto and hereby incorporated as part of this Order. The landfill is bounded on the north by Capitol Expressway, on the east by Coyote Creek, and on the south and west by houses along Locke Drive, Singleton Road, Brodie Drive and Grandbrook Way. The landfill is divided into two sections by Singleton Road, which runs approximately northeast/southwest across the site. This road is used as a route for pedestrians to traverse the landfill and is currently closed to vehicular traffic.
4. The landfill occupies approximately 80 acres directly adjacent to Coyote Creek. Part of the fill has been placed in the old Coyote Creek flood plain. Twenty to forty-foot deep pits were dug in the higher portions of the landfill to allow areas for filling. Wastes placed adjacent to Coyote Creek consisted primarily of concrete rubble and soil.

5. Land use within one-mile of the landfill is predominantly residential, but also includes offices, shopping centers, light industry, and agricultural and other open-space areas. There are about 10,500 residential dwellings within one mile of the landfill.
6. The Singleton Road Landfill is located on the gently sloping floor of the Santa Clara Valley near the northwestern termination of a low range of hills bordering the valley on the northeast. The floor of the valley is an alluvial plain comprising fluvial and coalescing alluvial fan deposits, which, in the vicinity of the site, vary from less than 300 to over 400 feet in thickness. Low bedrock ridges rise from the valley floor about 6,000 feet south and west of the site. Surficial soils at and near the landfill consist of artificial cover and fill material and Quaternary alluvium. The site is underlain by interbedded alluvial deposits. The deposits are Quaternary age, largely Holocene with possibly some Pleistocene at depth overlying bedrock.
7. The groundwater aquifers beneath the Singleton Road Landfill are considered to be part of the San Jose Plain groundwater basin. Groundwater recharge in the San Jose Plain groundwater basin near the Singleton Road Landfill predominantly occurs by groundwater underflow through the Edenvale gap from the Santa Teresa groundwater basin. The underflow through Edenvale gap was estimated to be from 21,000 to 40,000 acre-feet for 1985. Recharge to the San Jose Plain basin also occurs by groundwater infiltration from Coyote Creek. The amount of infiltration from Coyote Creek to the groundwater near Singleton Road Landfill is unknown.
8. Groundwater was greater than five feet below the base of the refuse in borings drilled through the landfill in the winter of 1986. During periods of higher recharge to the groundwater from either Coyote Creek or surface water infiltration, the shallow groundwater may rise to higher elevations. The general shallow groundwater gradient is in the northwesterly direction, with Coyote Creek acting as recharge for the shallow groundwater during the winter months. Eight groundwater monitoring wells were installed at the site in 1984. An additional thirteen wells were installed in 1986.
9. Water samples from perimeter groundwater monitoring wells G-2 and G-10 have consistently indicated the presence of 1,1-dichloroethane (DCA) in low concentrations during the past two years. These wells monitor the shallow groundwater along the perimeter of the site. Water samples from all of the perimeter wells consistently indicate total dissolved solids concentrations higher than that acceptable for drinking water.
10. Four off-site groundwater wells have been monitored as part of the water quality monitoring program for the Singleton Road Landfill during the past two years. These wells are designated as San Jose Well Nos. 3 (the 3868 Tuers well), and 5 (the Sylvandale School well) and are located approximately 900 and 1,600 feet respectively northwest of the landfill. The Tuers and Sylvandale wells are respectively located approximately 600 feet southeast, and 900 feet south of, the landfill. The depths of these four wells range from 235 to 400 feet. Low levels of 1,1,1-trichloroethane (TCA) have been consistently detected in San Jose Well Nos. 3 and 5. The source of TCE in these wells has not been identified at this time.

11. Current uses of groundwater in the vicinity of the landfill include municipal, industrial, agricultural, and domestic water supply. Water quality monitoring wells are widespread throughout the area.
12. Coyote Creek, tributary to San Francisco Bay, is controlled by Anderson reservoir several miles south of the landfill. The Federal Flood Insurance map indicates the maximum height for a 100-year flood to be 147 feet above mean sea level near the southeastern corner of the landfill. It has not been documented that the landfill perimeter is protected from washout during the 100-year stream flows in Coyote Creek.
13. The major active earthquake faults in the region include the San Andreas, Hayward, and Calaveras fault zones. The site is about eighteen miles east of the San Andreas fault zone, and about four miles southwest of the Hayward fault zone, and eight miles west of the Calaveras fault zone.
14. Order No. 81-8 required that the landfill be closed by September 15, 1982. Documentation of full compliance with closure requirements was to have been submitted by the discharger on or before October 30, 1982. The landfill has not been closed in accordance with the Board approved closure plan. Because the site was not closed in accordance with the closure plan prior to the effective date of the revised Subchapter 15 (November 27, 1984), the landfill must be closed pursuant to Article 8 of the revised subchapter.
15. Section 13273 of the Water Code requires that the State Water Resources Control Board rank all solid waste disposal sites in California, and that a solid waste water quality assessment test (SWAT) be conducted for each site on or before the designated submittal date for each rank. The Singleton Road Landfill was placed in the first rank, and submitted a SWAT report prior to July 1, 1987, as required by the Water Code.
16. Background water quality levels, for the purpose of establishing Water Quality Protection Standards (WQPS), have not been determined according to the requirements of Subchapter 15. Compliance with this Order will provide for the establishment of WQPS within one year after adoption of this Order.
17. The existing and potential beneficial uses of Coyote Creek and the San Francisco Bay are as follows:
 - a. Wildlife habitat
 - b. Water contact recreation
 - c. Non-contact water recreation
 - d. Commercial and sport fishing
 - e. Preservation of rare and endangered species
 - f. Estuarine habitat
 - g. Fish migration and spawning

The existing and potential beneficial uses of the groundwater in the vicinity of the Singleton Road Landfill are as follows:

- a. Domestic and municipal water supply
- b. Industrial process supply

- c. Industrial service supply
 - d. Agricultural supply
18. The Board adopted a revised Water Quality Plan for the San Francisco Bay Basin (Basin Plan) on December 17, 1986 and this Order implements the water quality objectives stated in that plan.
 19. This project constitutes a minor modification to land for the closure of an existing landfill, with changes to meet public health and safety standards, and is therefore categorically exempt from the provisions of the California Environmental Quality Control Act (CEQA) pursuant to Sections 15301 and 15304 of the Resources Agency Guidelines.
 20. The Board has notified the discharger and interested agencies and persons of its intent to update waste discharge requirements for the discharge, and has provided them with an opportunity to submit their written views and recommendations.
 21. The Board in a public meeting heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED that the City of San Jose, and any other persons that currently or in the future own this land or operate this facility, shall meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder and shall also comply with the following:

A. PROHIBITIONS

1. The waste disposal site shall not create a pollution or nuisance as defined in Section 13050 (1) and (m) of the California Water Code.
2. No hazardous, designated, or non-hazardous decomposable or water soluble wastes of any type shall be disposed of at this site.
3. Wastes shall not be located in any position where they can be carried from the disposal site and discharged into waters of the State or the United States.
4. The discharger, or any future owner or operator of this site, shall not cause the following conditions to exist in waters of the State at any place outside the waste management facility:
 - a. Surface Waters
 1. Floating, suspended, or deposited macroscopic particulate matter or foam.
 2. Bottom deposits or aquatic growth.
 3. Alteration of temperature, turbidity, or apparent color beyond natural background levels.

4. Visible, floating, suspended or deposited oil or other products of petroleum origin.
5. Toxic or other deleterious substances to be present in concentrations or quantities which may cause deleterious effects on aquatic biota, wildlife or waterfowl, or which render any of these unfit for human consumption either at levels created in the receiving waters or as a result of biological concentrations.

b. Ground Water

1. The ground water shall not be degraded as a result of the waste disposal site.
5. Leachate from wastes and ponded water containing leachate or in contact with refuse shall not be discharged to waters of the State or the United States.

B. SPECIFICATIONS

1. Water used during closure operations shall be limited to a minimal amount necessary for dust control and fire suppression.
2. The site shall be protected from any washout or erosion of wastes or covering material and from inundation which could occur as a result of a 100 year 24 hour precipitation event, or as the result of flooding with a return frequency of 100 years.
3. Surface drainage from tributary areas, and internal site drainage from surface and subsurface sources, shall not contact or percolate through wastes during the life of the site. Drainage ditches constructed over refuse fill shall be underlain with a minimum 5-foot thickness of compacted earth fill. Surface drainage ditches shall be constructed to ensure that all rainwater is diverted off-site and does not contact wastes or leachate.
4. The discharger shall ensure that the foundation of the site, the levees surrounding the site, the refuse fill, the structures which control leachate, surface drainage, erosion, and gas for this site are constructed and maintained to withstand conditions generated during the maximum probable earthquake.
5. The exterior surfaces of the landfill shall be graded, and maintained, to a minimum slope of three percent in order to promote lateral runoff of precipitation and prevent ponding of water on the landfill cover. In addition, the disposal site shall be covered with a minimum of 4 feet of cover and meet other applicable requirements as described in Article 8 of Subchapter 15.
6. Pursuant to Section 2580(d) of Subchapter 15, the discharger shall provide two surveyed permanent monuments on or near the landfill from which the location and elevation of wastes, containment structures, and monitoring facilities can be determined throughout

the post-closure maintenance period. These monuments shall be installed by a licensed land surveyor or registered civil engineer.

7. The discharger shall establish an irrevocable closure fund, or other means to ensure closure and post-closure maintenance pursuant to Section 2580(f) of Subchapter 15, that will provide sufficient funds to properly close the landfill and for the post-closure monitoring and maintenance of the site. For the purposes of planning the amount of this fund the discharger shall assume a post-closure period of at least 30 years. The discharger shall provide an evaluation of closure and post closure monitoring and maintenance costs.
8. The discharger shall maintain the waste management unit so as not to cause a statistically significant difference to exist between water quality at the compliance points and the WQPS to be established within one year of adoption of this Order. The compliance points are identified as perimeter ground water monitoring wells screened in aquifer zones that are potentially impacted by wastes at the landfill. The discharger shall establish WQPS according to the requirements of this Order and Article 5 of Subchapter 15 within one year of adoption of this Order. WQPS shall be established for, at a minimum, the following constituents:
 - a. pH
 - b. Specific Conductivity
 - c. Chloride
 - d. Total Organic Carbon
 - e. Nitrate Nitrogen
 - f. Total Kjeldahl Nitrogen
 - g. Total Phenol
 - h. Total Dissolved Solids
 - i. Arsenic
 - j. Total Chromium
 - k. Copper
 - l. Nickel
 - m. Zinc
 - n. Lead
9. The discharger shall install any additional ground water and leachate monitoring devices required to fulfill the terms of any Self-Monitoring Program issued to the discharger in order that the Board may evaluate compliance with the conditions of this Order.

C. PROVISIONS

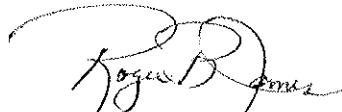
1. The discharger shall comply with all Prohibitions, Specifications, and Provisions of this Order, immediately upon adoption of this Order.
2. The discharger shall submit, by January 1, 1989, a revised closure plan for the site which shall include, at a minimum, the following: documentation of compliance with Specifications B.2, B.6 and B.7, or a time schedule for achieving compliance; proposed erosion

protection for landfill slopes greater than 10%; post closure land use; type of soils to be used for all layers of final cover; detail on methods used to attain the required cover permeability, and cover construction specifications, to include quality control/quality assurance measures; cost estimate for closure/post-closure maintenance; and, a detailed time schedule for closure. The revised closure plan shall also include a time schedule for submittal of a slope stability analysis for the landfill pursuant to Section 2595(f)(5) of Subchapter 15, to document compliance with Specification B.4 of this Order.

3. The discharger shall submit, by May 1, 1989, a report on the groundwater quality at the site that proposes Water Quality Protection Standards for the constituents listed in Specification B.8 of this Order according to the requirements of Article 5 of Subchapter 15. If it is determined that the statistical comparison requirements of Article 5 are infeasible the report should include a proposal, pursuant to Section 2510(b) of Subchapter 15, for an alternative comparison procedure.
4. The discharger shall submit, by September 1, 1988, an evaluation of leachate build-up within all portions of the landfill, and a proposed leachate management plan. This plan shall ensure compliance with Prohibition A.5 of this Order. This management plan should also provide for an annual evaluation of the leachate generated at the site. If recirculation of the leachate is to be considered, the discharger must demonstrate that the quantity of leachate being recirculated will not exceed a solid to liquid ratio of at least 5:1 using a moisture content of the solid waste of at least 30%.
5. The discharger shall file with the Regional Board quarterly self-monitoring reports performed according to any self-monitoring program issued by the Executive Officer.
6. All reports prepared pursuant to these Provisions shall be prepared under the supervision of a registered civil engineer or certified engineering geologist.
7. The discharger shall remove and relocate any wastes which are discharged at this site in violation of these requirements.
8. The discharger shall file with this Board a report of any material change or proposed change in the character, location, or quantity of this waste discharge. For the purpose of these requirements, this includes any proposed change in the boundaries of the disposal areas or the ownership of the site.
9. The discharger shall maintain a copy of this Order at the site so as to be available at all times to site operating personnel.
10. This Board considers the property owner and site operator to have continuing responsibility for correcting any problems which arise in the future as a result of this waste discharge or related operations.

11. The discharger shall maintain all devices or designed features installed in accordance with this Order such that they continue to operate as intended without interruption except as a result of failures which could not have been reasonably foreseen or prevented by the discharger.
12. The discharger shall permit the Regional Board or its authorized representative, upon presentation of credentials:
 - a. Entry upon the premises on which wastes are located or in which any required records are kept.
 - b. Access to copy any records required to be kept under the terms and conditions of this Order.
 - c. Inspection of any treatment equipment, monitoring equipment, or monitoring method required by this Order.
 - d. Sampling of any discharge or ground water covered by this Order.
13. This Board's Order No. 81-8 is hereby rescinded.
14. These requirements do not authorize commission of any act causing injury to the property of another or of the public; do not convey any property rights; do not remove liability under federal, state or local laws; and do not authorize the discharge of wastes without appropriate permits from other agencies or organizations.

I, Roger B. James, Executive Officer, do hereby certify that the foregoing is a full, complete, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on June 15, 1988.


Roger B. James
Executive Officer

Attachments: A) Site map
B) Self Monitoring Program

KEY



ATTACHMENT A

SITE LOCATION MAP

SINGLETON ROAD LANDFILL

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

SELF-MONITORING PROGRAM

FOR

THE CITY OF SAN JOSE
SINGLETON ROAD LANDFILL
SAN JOSE, SANTA CLARA COUNTY

ORDER NO. 88-098

CONSISTS OF

PART A

AND

PART B

PART A

A. GENERAL

Reporting responsibilities of waste dischargers are specified in Sections 13225(a), 13267(b), 13383, and 13387(b) of the California Water Code and this Regional Board's Resolution No.73-16. This Self-Monitoring Program is issued in accordance with Section C.8 of Regional Board Order No. 88-098.

The principal purposes of a self-monitoring program by a waste discharger are: (1) to document compliance with waste discharge requirements and prohibitions established by the Board, (2) to facilitate self-policing by the waste discharger in the prevention and abatement of pollution arising from waste discharge, (3) to develop or assist in the development of effluent standards of performance, pretreatment and toxicity standards, and other standards, and (4) to prepare water and wastewater quality inventories.

B. SAMPLING AND ANALYTICAL METHODS

Sampling

Sample collection, storage, and analyses shall be performed according to most recent version of Standard Methods for the Analysis of Wastewater and in accordance with an approved sampling and analysis plan.

Water and waste analysis shall be performed by a laboratory approved for these analyses by the State Department of Health. The director of the laboratory whose name appears on the certification shall supervise all analytical work in his/her laboratory and shall sign all reports of such work submitted to the Regional Board.

All monitoring instruments and equipment shall be properly calibrated and maintained to ensure accuracy of measurements.

C. DEFINITION OF TERMS

1. A grab sample is a discrete sample collected at any time.
2. A composite sample is a sample composed of individual grab samples mixed in proportions varying not more than plus or minus five percent from the instantaneous rate of waste flow corresponding to each grab sample collected at regular intervals not greater than one hour, or collected by the use of continuous automatic sampling devices capable of attaining the proportional accuracy stipulated above throughout the period of discharge or 24 consecutive hours, whichever is shorter.
3. Receiving waters refers to any water which actually or potentially receives surface or groundwaters which pass over, through, or under waste materials or contaminated soils. In this case the groundwater beneath and adjacent to the landfill, the surface runoff from the site, the drainage ditches surrounding the site, and Coyote are considered the receiving waters.

4. Standard observations refer to:

a. Receiving Waters

- 1) Floating and suspended materials of waste origin: presence or absence, source, and size of affected area.
- 2) Discoloration and turbidity: description of color, source, and size of affected area.
- 3) Evidence of odors, presence or absence, characterization, source, and distance of travel from source.
- 4) Evidence of beneficial use: presence of water associated wildlife
- 5) Flow rate.
- 6) Weather conditions: wind direction and estimated velocity, total precipitation during the previous five days and on the day of observation.

b. Perimeter of the waste management unit.

- 1) Evidence of liquid leaving or entering the waste management unit, estimated size of affected area and flow rate. (Show affected area on map)
- 2) Evidence of odors, presence or absence, characterization, source, and distance of travel from source.
- 3) Evidence of erosion and/or daylighted refuse.

c. The waste management unit.

- 1) Evidence of ponded water at any point on the waste management facility.
- 2) Evidence of odors, presence or absence, characterization, source, and distance of travel from source.
- 3) Evidence of erosion and/or daylighted refuse.
- 4) Standard analysis and measurements refer to:
 - a. pH
 - b. Electrical Conductivity (EC)
 - c. Total Dissolved Solids (TDS)
 - d. Total Phenols
 - e. Chloride
 - f. Total Organic Carbon
 - g. Nitrate Nitrogen
 - h. Total Kjeldahl Nitrogen
 - i. Water elevation in feet above Mean Sea Level
 - j. Settleable Solids, ml/l/hr

- k. Turbidity, NTU
- 1. EPA Method 601, identifying all peaks greater than 1 microgram/liter.

D. SCHEDULE OF SAMPLING, ANALYSIS, AND OBSERVATIONS

The discharger is required to perform sampling, analysis, and observations according to the schedule specified in Part B, and the requirements in Article 5 of Subchapter 15.

E. RECORDS TO BE MAINTAINED

Written reports shall be maintained by the discharger, and shall be retained for a minimum of three years. This period of retention shall be extended during the course of any unresolved litigation regarding this discharge or when requested by the Board. Such records shall show the following for each sample:

1. Identity of sample and sample station number.
2. Date and time of sampling.
3. Date and time that analyses are started and completed, and name of the personnel performing the analyses.
4. Complete procedure used, including method of preserving the sample, and the identity and volumes of reagents used. A reference to a specific section of a reference required in Part A Section B is satisfactory.
5. Calculation of results.
6. Results of analyses, and detection limits for each analyses.

F. REPORTS TO BE FILED WITH THE BOARD

1. Written self-monitoring reports shall be filed by the 15th day of the month following the report period. In addition an annual report shall be filed as indicated in F.2. The reports shall be comprised of the following:

a. Letter of Transmittal

A letter transmitting the essential points in each self-monitoring report should accompany each report. Such a letter shall include a discussion of any requirement violations found during the last report period, and actions taken or planned for correcting the violations, such as, operation and/or facilities modifications. If the discharger has previously submitted a detailed time schedule for correcting requirement violations, a reference to the correspondence transmitting such schedule will be satisfactory. If no violations have occurred in the last report period this shall

be stated in the letter of transmittal. Monitoring reports and the letter transmitting the monitoring reports shall be signed by a principal executive officer at the level of vice president or his duly authorized representative, if such representative is responsible for the overall operation of the facility from which the discharge originates. The letter shall contain a statement by the official, under penalty of perjury, that to the best of the signer's knowledge the report is true, complete, and correct.

- b. Each monitoring report shall include a compliance evaluation summary sheet. This sheet shall contain:
 - 1) The sample mean and the sample variance for all sample sets taken from all compliance points, and shall determine if the difference between the mean of each sample set and the water quality protection standard is significant at the 0.05 level using Cochran's Approximation to the Behrens-Fisher Student's t-test as described in Appendix II of Subchapter 15. The discharger may propose an alternative statistical procedure to be used in making this determination pursuant to Section 2555(h)(3) of Subchapter 15. If a statistically significant difference is found this shall be reported as a suspected requirement violation in the letter of transmittal.
 - 2) A graphic description of the velocity and direction of groundwater flow under/around the waste management unit, based upon the past and present water level elevations and pertinent visual observations.
 - 3) The method and time of water level measurement, the type of pump used for purging, pump placement in the well; method of purging, pumping rate, equipment and methods used to monitor field pH, temperature, and conductivity during purging, calibration of the field equipment, results of the pH, temperature conductivity and turbidity testing, well recovery time, and method of disposing of the purge water.
 - 4) Type of pump used, pump placement for sampling, a detailed description of the sampling procedure; number and description of equipment, field and travel blanks; number and description of duplicate samples; type of sample containers and preservatives used, the date and time of sampling, the name and qualifications of the person actually taking the samples, and any other observations; the chain of custody record.
- c. A map or aerial photograph shall accompany each report showing observation and monitoring station locations.
- d. Laboratory statements of results of analyses specified in Part B must be included in each report. The director of the laboratory whose name appears on the laboratory certification shall supervise all analytical work in his/her laboratory and shall sign all reports of such work submitted to the Board.

- 1) The methods of analyses and detection limits must be appropriate for the expected concentrations. Specific methods of analyses must be identified. If methods other than EPA approved methods or Standard Methods are used, the exact methodology must be submitted for review.
 - 2) In addition to the results of the analyses, laboratory quality control/quality assurance (QA/QC) information must be included in the monitoring report. The laboratory QA/QC information should include the method, equipment and analytical detection limits; the recovery rates; an explanation for any recovery rate that is less than 80%; the results of equipment and method blanks; the results of spiked and surrogate samples; the frequency of quality control analysis; and the name and qualifications of the person(s) performing the analyses.
- e. An evaluation of the effectiveness of the leachate monitoring/control facilities.
 - f. A summary and certification of completion of all standard observations for the waste management unit, the perimeter of the waste management unit, and the receiving waters.
 - g. The quantity and types of wastes disposed of during the past quarter, and the locations of the disposal operations.

2. CONTINGENCY REPORTING

- A. A report shall be made by telephone of any seepage from the disposal area immediately after it is discovered. A written report shall be filed with the Board within five days. This report shall contain the following information:
 - 1) a map showing the location(s) of discharge;
 - 2) approximate flow rate;
 - 3) nature of effects; i.e. all pertinent observations and analyses; and
 - 4) corrective measures underway or proposed.
- B. A report shall be made in writing to the Board within seven days if a statistically significant difference is found between a self-monitoring sample set and a WQPS. Notification shall indicate what WQPS(s) have been exceeded. The discharger shall immediately resample at the compliance point(s) where this difference has been found and analyze another sample set of at least four portions split in the laboratory from the source sample.
- C. If resampling and analysis confirms the earlier finding of a statistically significant difference between self-monitoring results and WQPS(s) the discharger must submit to the Board within 90 days an amended Report of Waste Discharge for establishment of a verification monitoring program meeting the requirements of Section 2557 of Subchapter 15. This submittal shall include the information required in Section 2556(b)(2) of Subchapter 15.

- D. The discharger must notify the Board within seven days if the verification monitoring program finds a statistically significant difference between samples from the verification monitoring program point of compliance and the WQPS(s).
 - E. If such a difference or differences are found by the verification monitoring program, it will be concluded that the discharger is out of compliance with this Order. In this event the discharger shall submit within 180 days an amended Report of Waste Discharge requesting authorization to establish a corrective action program meeting the requirements of Section 2558 of Subchapter 15. This submittal shall include the information required in Section 2557(g)(3) of Subchapter 15.
3. By January 31 of each year the discharger shall submit an annual report to the Board covering the previous calendar year. This report shall contain:
- a. Tabular and graphical summaries of the monitoring data obtained during the previous year.
 - b. A comprehensive discussion of the compliance record, and the corrective actions taken or planned which may be needed to bring the discharger into full compliance with the waste discharge requirements.
 - c. A map showing the area, if any, in which filling has been completed during the previous calendar year.
 - d. A written summary of the groundwater analyses indicating any change in the quality of the groundwater.
 - e. An evaluation of the effectiveness of the leachate monitoring/control facilities.
4. A boring log shall be submitted for each sampling well established for this monitoring program, as well as a report of inspection or certification that each well has been constructed in accordance with the construction standards of the Department of Water Resources. These shall be submitted within 30 days after well installation.

Part B

1. DESCRIPTION OF OBSERVATION STATIONS AND SCHEDULE OF OBSERVATIONS

A. ON-SITE OBSERVATIONS

STATION	DESCRIPTION	OBSERVATIONS	FREQUENCY
V-1 thru V-'n'	Located on the waste disposal area as delineated by a 500 foot grid network.	Standard observations for the waste management unit.	Monthly
P-1 thru P-'n' (perimeter)	Located at equidistant intervals not exceeding 1000 feet around the perimeter of the waste management unit.	Standard observations for the perimeter.	Monthly

A map showing visual and perimeter compliance points (V and P stations) shall be submitted by the discharger in the quarterly monitoring report.

B. GROUND WATER MONITORING

STATION	DESCRIPTION	OBSERVATION	FREQUENCY
G-1, G-3, G-5, G-8 thru G-11	Groundwater monitoring wells, as shown on the attached site map.	Standard analysis other than "j".	Once per quarter.
G-2, G-4, G-6, G-7, G-12 thru G-21	Groundwater monitoring wells, as shown on the attached site map.	Water elevation, in feet above sea level.	Once per quarter.

C. LEACHATE MONITORING

STATION	DESCRIPTION	OBSERVATION	FREQUENCY
GR-1 thru "GR-n"	Leachate control facilities, as shown on the attached site map, including sumps and wells to be installed	Depth of leachate built up at base of land-fill and volume removed. Elevation of leachate above Mean Sea Level.	Once per quarter and at time of leachate removal.

D. SEEPAGE MONITORING

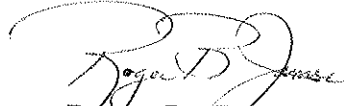
STATION	DESCRIPTION	OBSERVATION/ ANALYSIS	FREQUENCY
S-1 thru S-'n' (seepage)	At any point(s) at which seepage is found occurring from the waste management unit.	Standard observations for the perimeter, and standard analysis other than "i".	Daily until remedial action is taken and seepage ceases.
R-001 (receiving waters, upstream)	Located in receiving waters 200 feet upstream from the upper-most point of seepage discharge(s).	Standard observation for receiving waters and standard analysis other than "i".	Daily, during a seepage event.
R-002 (receiving waters, downstream)	Located in receiving waters 200 feet downstream of seepage discharge(s).	Same as receiving waters upstream.	Daily during a seepage event.

I, Roger B. James, Executive Officer, hereby certify that the foregoing Self-Monitoring Program:

1. Has been developed in accordance with the procedures set forth in this Board's Resolution No. 73-16 in order to obtain data and document compliance with waste discharge requirements established in this Board's Order No. 88-098.

2. Is effective on the date shown below.
3. May be reviewed or modified at any time subsequent to the effective date, upon written notice from the Executive Officer, or request from the discharger.

JUNE 20, 1988
Date Ordered


Roger B. James
Executive Officer

